A History of Excellence

The Walter Reed Army Institute of Research dates back to 1893. Around the world, WRAIR works alongside civilian researchers, medical professionals and military personnel to develop and test products that will ultimately reduce the impact of some of the world's most lethal diseases.

Infectious Diseases

WRAIR is a leader in global efforts to combat the world’s most pervasive infectious diseases, including malaria, HIV/AIDS, Ebola and dengue. Though WRAIR’s primary mission is to protect U.S. Service Members, its scientific contributions benefit global health.

Some of WRAIR’s enduring contributions to public health include:

Vaccines

• Developed vaccines for prevention of Japanese encephalitis, hepatitis A and adenovirus
• Led the trial of the first HIV/AIDS vaccine to demonstrate some protection against infection (RV144)

Antimalarials

• Demonstrated efficacy of Malarone, primaquine and weekly tafenoquine to treat and prevent malaria

Diagnostics

• Developed chikungunya arthropod vector rapid detection device and rapid detection kits for leishmaniasis, dengue and Rift Valley fever

Emerging Infectious Disease Threats

• WRAIR’s expertise and research capabilities are leveraged to support outbreak responses and develop disease countermeasures
• WRAIR has initiated four Ebola vaccine studies in U.S. and Africa
• WRAIR is conducting the first-in-man vaccine study for MERS, which has up to 40% fatality rate

Brain Health and Performance

Research in military psychiatry and neuroscience has been an integral part of the Institute for more than 70 years. WRAIR’s Center for Military Psychiatry and Neuroscience develops evidence-based strategies to diagnose, prevent and mitigate the psychological demands of war, continuous operations and brain trauma associated with military service.

In order to inform military health policy and training, WRAIR’s neuroscience and behavioral health researchers aim to:

• Understand and improve the behavioral health and well-being of active duty personnel and their families
• Support Soldier alertness, performance and resilience during operations and deployment
• Prevent, diagnose and treat traumatic brain injuries

WRAIR has been a seminal partner in pioneering efforts to discover biomarkers to diagnose traumatic brain injury
Exceptional Resources

WRAIR provides unique research capabilities and innovative solutions for a range of Force Health and Readiness challenges currently facing U.S. Service Members, along with threats anticipated during future operations.

Headquartered in Silver Spring, Maryland, WRAIR boasts cutting-edge research equipment and laboratories, including biosafety level 3 laboratories, accredited animal research facilities and a vaccine pilot bioproduction facility.

Clinical Trials Center
This center has focused capabilities to test new candidate drugs and vaccines to prevent and treat infectious diseases. It has conducted more than 140 trials composed of 10-14 clinical studies.

Insectary
Originally developed by WRAIR, the human malaria challenge model enables in-house testing of prophylactics, therapeutics and vaccines. The insectary can produce up to 10,000 mosquitos each week and deliver malaria-carrying mosquitos for clinical studies globally.

Multidrug-Resistant Organism Repository and Surveillance Network
The MRSN is the largest, most comprehensive system in the world to identify multidrug-resistant organisms. MRSN improves clinical care and patient safety by performing rapid susceptibility testing and whole-genome sequencing of suspect infections.

Sleep Research Center
WRAIR is a global leader in the study of sleep and its interface with operational performance. The WRAIR SRC sleep suites offer the infrastructure required to conduct sleep deprivation and intervention studies twenty-four hours a day.

International Network
With a wide presence in Africa and Asia and a lab in the Caucasus region, WRAIR conducts research where infectious disease threats are greatest. Longstanding partnerships with host countries foster global health and medical diplomacy. A lab established in Washington state studies and improves psychological resilience tools for Service Members and their families, expanding WRAIR’s presence in the Pacific region.